KNOWLEDGE ORGANISER
Year 5 Summer Half Term 2

Curriculum Intent Statement -

At St. Augustine's Catholic Primary School, we are passionate about children's learning. The Cognitive Load research theory and Rosenshine's Principles of Instruction highlights that children learn through remembering and recalling and this theory is embedded this within the knowledge of our curriculum.

'Learning is Remembering and Recalling...'

Our curriculum is planned and sequenced around the specific vision of the National Curriculum, our Curriculum Drivers, the Laudato Si and the Gospel Values. This is based upon our School Catholic Mission that we have a moral purpose for our pupils to flourish in a safe, happy and stimulating environment, and leave us with the knowledge and skills, personal qualities and aspirations, to make the world a better place, inspired by the Gospel. We believe that this core belief underpins everything we do here at St. Augustine's.

St. Augustine's curriculum will provide inspiring and relevant learning opportunities for our children to develop the knowledge and skills that can be fluently applied across all subject areas. It will ensure that all children's individual needs and experiences are developed through local, national and global contexts.

In order for children to relate to their learning, topic areas will be carefully planned and supported through external visitors talking about their experiences, or class trips to supplement the children's learning.

Curriculum Development - Intent

LauDato Si, National Curriculum and Gospel Values

JUSTICE
Working for a fairer world

KINDNESS
Gentleness

COURAGE
Standing up for the truth

INTEGRITY
Do what you say

FORGIVENESS
Reconciliation

PEACE
Non-violence, committed to peace making

COMPASSION
Empathy

HUMILITY
Seeing life as a gift

Using our Secrets to Success…

Don't give up

Try new things

Work hard

Understand others

SECRET SUCCESS SECRET

Concentrate

Improve

Imagine

Push yourself

Rosenshine's Principles of Instruction

Parents in Partnership and Knowledge Organisers

English
Reading
Writing
Phonics
Spelling
Punctuation
Grammar

Maths
Arithmetic
Fluency
Reasoning
Problem Solving

RE
Knowledge &
Understanding
Engagement &
Response
Analysis & Evaluation

The Culture Team
History
Geography
French (MFL)

The Arts and Technology Team
Design
Technology Art
Music
Computing

The Healthy Hearts and Minds Team
PE
Science
PSHE / RSHE

Being the 'Best we can be'

Our Laudato Si key question this half term...

How can we act as fair and just custodians of our world?

Our Focus Gospel Value this half term is...

Justice

"He has told you, O man, what is good; and what does the Lord require of you but to do **justice**, and to love kindness, and to walk humbly with your God?" (Micah 6:8)

School Mission Statement

Lead us Lord,
To act justly,
To love tenderly,
And to walk humbly.

Amen

Australia…

This half term Year 5 have lots of exciting things planned. We will be finding out about the country of Australia. We will find out about its history, its geography and the people that live there. We will focus upon the settlement of the country by Europeans and how this affected the indigenous peoples who already lived there Questions we will ask will include:

- Who were the original inhabitants of Australia?
- When did Europeans come to Australia and what impact did they have?
- How is climate change affecting the whole continent?

How can I help my child with this topic:
Using an atlas or online version, locate the United Kingdom and Australia.
Identify famous mountain ranges, rivers and other Australian features of physical geography.
Research the indigenous peoples of Australia, their history and culture.

The next few slides will show you some of the things that we will be covering within specific subjects. Each subject will look at a specific set of skills that will allow children to meet the National Curriculum objectives within Year 5.

AUSTRALIA

Australia is a unique continent because of several reasons. The continent of Australia has only one country, which is Australia itself! Since Australia is surrounded by water from all sides, it is also known as the island continent. It lies between the Indian and Pacific oceans, and is approximately 3,200 km from north to south and 4,000 km from east to west. Area wise, it is the sixth largest country in the world. It is the flattest and the driest of continents, after Antarctica. It is also referred to as the 'land down under' because it lies below the equator.

Australia is home to many unique animals

PLATYPUS
the mammal that lays eggs.

KANGAROO
The only animal that carries its young in a pouch.

EMU
A unique flightless bird.

The Australian landscape is so vast and varied; there are deserts, snow clad fields, flat lands, plateaus, rainforests and more. The first occupants of this continent were the aboriginal people who arrived in Australia about 60,000 years ago.

The credit for the European discovery of Australia goes to Captain James Cook in 1770.

Interesting facts about Australia

- Australia is the largest island and the smallest continent in the world. It is two times larger than India.
- Geologists believe Australia to be the world's oldest continent.
- The name Australia is derived from a Latin word 'Australis' that means 'Southern'. It is thus named because it lies entirely to the south of the equator.
- Australia's capital city is Canberra.
- Officially, Australia is also known as 'The Commonwealth of Australia'.

- Two-thirds of Australia is made up of flat desert area.
- The population of Australia is more than 19 million.
- Australia is regarded as the world's thirteenth largest economy.

- Sydney is the biggest city and most populous city in Australia.
- The highest point in the continent is Mount Kosciusko.
- The 2000 km long Great Barrier Reef located in Australia is the world's largest coral reef.

English Knowledge - KEY VOCABULARY

Grammar Key Vocabulary – Sentence Level

Progressive tenses – showing a continuous action e.g. is clapping, was jumping (formed by adding –ing to the verb).

Present perfect tense – used for actions that started in the past and continue into the present e.g. I have lived in Weymouth for 10 years (formed using has/have + past tense verb).

Adverbial phrases – describe how, when, where or why the verb happens e.g. in the garden, before school, at the park (adverbials at the start of a sentence <u>must</u> be followed by a comma).

Subject – the noun that is doing the verb e.g. *The <u>dog</u> chased the ball.*
Object – the noun that is having the verb done to it e.g. *The dog chased the <u>ball.</u>*

Active voice – the subject comes before the verb in a sentence e.g. *The <u>dog</u> chased the ball.*

Passive voice – the object comes before the verb in a sentence e.g. *The <u>ball</u> was chased by the dog.*

Grammar Key Vocabulary – Word Level

Preposition – describes when or where something is in relation to something else (after, before, under, inside).

Determiner – introduces a noun:
- Articles (a, an, the)
- Demonstratives (this, that, these, those)
- Quantifiers (one, two, some, many, multiple)
- Possessive (his, her, their)

Subordinating conjunction – a word that connects an independent clause to a dependent clause (because, although, however).

Co-ordinating conjunction – a word that joins two elements of equal importance (FANBOYS – for, and, nor, but, or, yet, so).

Synonyms – a word that means the same as another e.g. old and ancient.
Antonyms - a word that means the opposition – e.g. old and young.

Punctuation Key Vocabulary
Parenthesis ( ) , , - - additional information or an aside within a sentence. Punctuated with brackets (for short or formal information), dashes – for informal chatty – and commas for clauses.
Semi colon ; used to join independent clauses (clauses that make sense on their own) in the place of a conjunction.
Colon : used to introduce a list or to join two independent clauses when the second clause relates to the first.
Hyphens to avoid ambiguity used to avoid confusion between words which would otherwise have the same spelling but a different meaning.

English Knowledge & Skills

WRITING - Short stories & Balanced arguments

AMPS descriptive techniques to describe setting, atmosphere and characters:
Alliteration – Most of the **initial letter sounds** of the words in each line are the same.
Metaphor – Saying an object **is** something.
Personification – A **human** quality is given to an object.
Simile - Comparison is used by using '**as a**' or '**like a**'.

Plot – developing problems and solutions within a story.

Dialogue – using the speech of characters to advance action in a story.

READING Key vocabulary

Word meaning - Explaining the meaning of words in context and explaining how word choice enhances meaning.

Retrieval - Finding details and information from a text.

Prediction - Saying what will happen next or as a result of something.

Comprehension – understanding the text and how content is related to the meaning as a whole.

Inference - reaching a conclusion which you can explain and justify with evidence from the text.

Deduction - Using evidence in a text to support an idea.

Summary – summarising main ideas from across paragraphs.

Don't forget the Vocabulary Challenge!

SPELLING
- Words with silent letters
- Words ending **in ment**
- Modal verbs
- Adverbs of possibility and frequency
- Statutory Spelling Challenge Words
- **Homophones** – words that sound the same but mean different

HOW TO HELP – Writing
- Discuss descriptive techniques when reading.
- Discuss how authors develop the plot in their stories.
- Look at dialogue and how it moves a story on.
- Encourage your child to write as much as possible for as many different purposes as you can.

HOW TO HELP - Grammar
- Speak in grammatically accurate sentences.
- Spot gramma being taught at school when reading.
- Work together on your child's IXL homework.

HOW TO HELP - Reading
- Read with your child (lots)
- Discuss vocabulary and develop understanding of new words
- Visit local libraries
- Read comics/magazines/newspapers
- Let your child see you read
- Make reading enjoyable- not a battle
- Let children read what interests them

Spelling Y5 & 6 Curriculum words

accommodate	conscience	existence	muscle	rhythm
accompany	conscious	explanation	necessary	sacrifice
according	controversy	familiar	neighbour	secretary
achieve	convenience	foreign	nuisance	shoulder
aggressive	correspond	forty	occupy	signature
amateur	criticise	frequently	occur	sincere
ancient	curiosity	government	opportunity	sincerely
apparent	definite	guarantee	parliament	soldier
appreciate	desperate	harass	persuade	stomach
attached	determined	hindrance	physical	sufficient
available	develop	identity	prejudice	suggest
average	dictionary	immediate	privilege	symbol
awkward	disastrous	immediately	profession	system
bargain	embarrass	individual	programme	temperature
bruise	environment	interfere	pronunciation	thorough
category	equip	interrupt	queue	twelfth
cemetery	equipped	language	recognise	variety
committee	equipment	leisure	recommend	vegetable
communicate	especially	lightning	relevant	vehicle
community	exaggerate	marvellous	restaurant	yacht
competition	excellent	mischievous	rhyme	

Help your child to practice spelling and using these words.

Look for them in books.

Can they write them in their homework?

Maths Knowledge – KEY VOCABULARY

Number and the 4 Operations

Divisor – the number you are dividing by
Quotient – the answer to a division calculation
Product – the answer to a multiplication question
Factors – numbers that go into a given number (come in pairs) e.g. factors of 12 are:

  1 and 12 2 and 6 3 and 4

Multiples – in the times table of - e.g. multiples of 12 are 12, 24, 36 etc.
Lowest Common Multiple – the lowest multiple of 2 or more numbers that are the same.
Highest Common Factor – the largest factor that is a factor of two or more other numbers
Integer – a whole number
Prime numbers – numbers that only have 2 factors, 1 and itself
Decimal – part of a whole where 1 is the whole
Percent – part of a whole where 100% represents the whole

Fractions

Equivalence – fractions that have the same value/are the same size
Numerator – the top number of a fraction (how many parts selected from the whole)
Denominator – the bottom number of a fraction (how many parts the whole is split into)
Simplify – giving a fraction in the simplest form using the smallest possible numerator and denominator (e.g. 50/100 = ½)
Common denominator – finding the lowest common multiple of two or more denominators to allow you to add or subtract them
Mixed number – a whole (integer) and a fraction e.g. 1 ½
Improper fraction – where the numerator is larger than the denominator e.g. 3/2. Improper fractions can be converted into mixed numbers e.g. 3/2 = 1 ½

HOW TO HELP
Mental arithmetic games – e.g. Countdown.

Regularly revisit times tables facts up to 12 x 12.

Use maths in daily life – cooking, measures, shopping etc.

Be positive about maths at home!

Embrace struggle! Teach your child that it's good to get stuck! This is how we learn best. Allow time for resilience building.

Fluency, Reasoning and Problem Solving Key Vocabulary -

Fluency - Using number and calculation skills accurately and efficiently
Reasoning - Following a line of enquiry, justifying and proving their answers
Problem Solving - Solving real life and logical problems using mathematical understanding

Maths – Geometry & Measures

This half term we are learning to :

Geometry

Geometry: Properties of shape
-Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
-Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
-Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
-Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- Draw given angles, and measure them in degrees.
- Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°

Geometry: position & direction
-Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.
Measure: converting units
- Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml]
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Solve problems involving converting between units of time.

Measure: Volume
- Estimate volume (for example using 1cm2 blocks to build cuboids – including cubes) and capacity (for example using water)
- Use all four operations to solve problems involving measures.

Maths – Shape

Properties of Shape

Key Vocabulary	Triangles	Quadrilaterals

Key Vocabulary

- angle
- right angle
- acute
- obtuse
- horizontal
- vertical
- diagonal
- parallel
- perpendicular
- two-dimensional
- polygon
- line of symmetry
- reflection
- mirror line
- isosceles
- equilateral
- scalene
- quadrilateral
- rhombus
- parallelogram
- trapezium

Triangles

Triangles have 3 sides and 3 vertices. The total of the angles in a triangle is 180°.

An equilateral triangle is a regular polygon. It has sides of equal length and each angle is 60°.

An isosceles triangle has two sides of equal length and two angles of equal size.

A right-angled triangle always has one 90° angle.

It can be isosceles or scalene.

A scalene triangle has no equal sides or angles.

Quadrilaterals

A quadrilateral is a polygon with four sides.
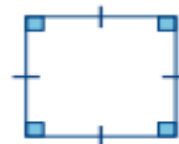
A square has four sides of equal length and four right angles (90°). A square is also a rectangle, a rhombus and a parallelogram.

A rectangle has two pairs of parallel, equal sides and four right angles. A rectangle is also a parallelogram.

A parallelogram has two pairs of parallel, equal sides and opposite equal angles.

A rhombus has four sides of equal length and opposite equal angles. A rhombus is also a parallelogram.
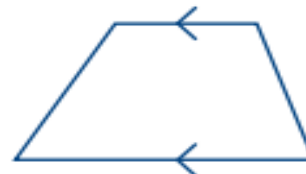
A trapezium only has one pair of opposite parallel sides.

A kite has two pairs of adjacent equal sides and one pair of opposite equal angles.

Maths – Shape

Properties of Shape

Angles

An angle is created when two straight lines meet at a point or intersect.

Right angle
The intersection of perpendicular lines creates a right angle.

90°   90°

Acute angle
Any angle measuring more than 0 degrees and less than 90 degrees is acute.

65°   30°

Obtuse angle
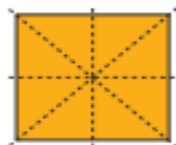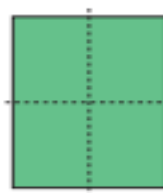Any angle measuring more than 90 degrees but less than 180 degrees is obtuse.

120°

Lines of Symmetry

Lines of symmetry may be horizontal, vertical or diagonal. Some 2D shapes will have no lines of symmetry and some 2D shapes will have multiple lines of symmetry.

| A square has four lines of symmetry. | A rectangle has two lines of symmetry. | An equilateral triangle has three lines of symmetry. | An isosceles triangle has one line of symmetry. | A rhombus has two lines of symmetry. |
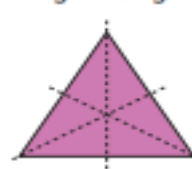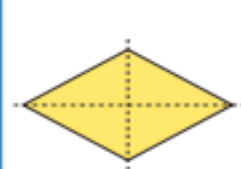
Symmetric Figures

Patterns and shapes can be reflected in a mirror line. Mirror lines can be vertical, horizontal or diagonal.

Maths – Measures

Weight, Length and Capacity Place Mat
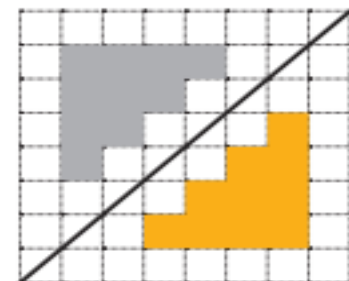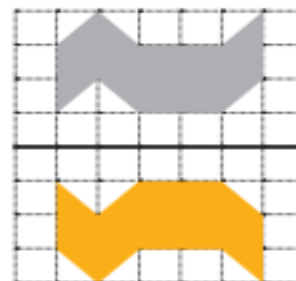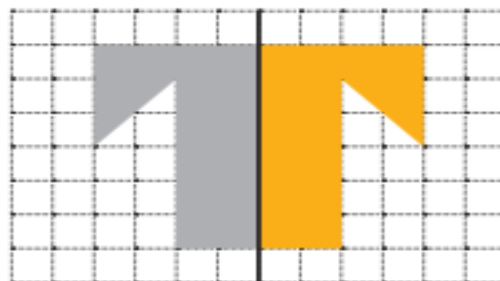
Length

1 centimetre (cm) = 10 millimetres (mm)

1 metre (m)   =   100 centimetres (cm)

1 kilometre (km) =   1000 metres (m)

Weight

1 gram (g)   =   1000milligrams (mg)

0.1 kilograms (kg)   =   100 grams (g)

1 kilogram (kg)   =   1000 grams (g)

1 tonne =   1000 kilograms (kg)

Capacity

1 litre (l)   =   1000 millilitres (ml)

1 litre (l) = 100 centilitres (cl)

1 centilitre (cl) = 10 millilitres (ml)

0.1 litres (l) = 100 millilitres (ml)

Imperial Units

1 pint = 568ml

1 inch = 2.5 cm or 25 mm

1 foot = 12 inches or 30 cm

1 mile = 1.6 km

1 ounce = 25g

1 pound (lb) = 500g

RECONCILIATION – INTER-RELATING Come and See for yourself

– No. 24 –

"We were able to work out our differences, apologize to each other, and finally move forward in our friendship. Not only was it an answer to prayer, but truly 'God at work' in restoring and strengthening a bond."

100 STORIES

Networks of friendships and relationships enable human beings to live together. When a child's power to reach out, trust and make friends is diminished, they may suffer the effects for a lifetime. Both children and adults have to discover their ability to reach out and repair what has been damaged.
If human beings are to live together in relationships, there is always need for reconciliation.

Christians believe that, in Jesus Christ, the world has been reconciled to God. Through and in Christ, every human being is offered the power to reach out in forgiveness and peace, to receive and to offer reconciliation.

Science: Materials
Animals including Humans

We will be learning this half term how to describe the changes as humans develop to old age.


THE SCIENCE OF GETTING OLD
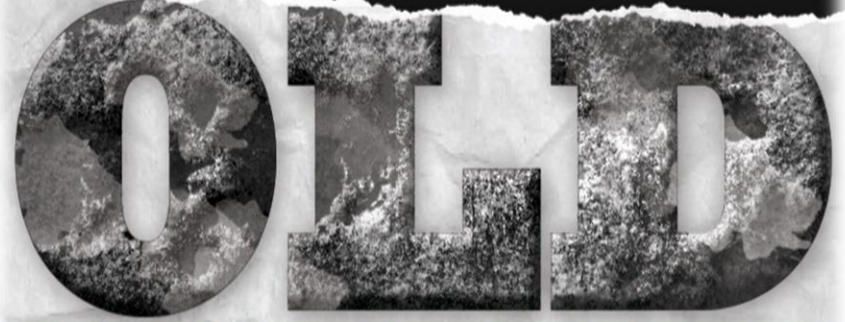
Nobody lives forever. In fact, if you're over 20 years old, it's likely you're already experiencing the effects of age on your body (they are probably slight if you're that young). Aging is an inevitable part of life, but do you know the science behind why hair becomes gray or skin wrinkles as we age?

Why Do We Age?

EVENTUALLY, the cells in our bodies become less equipped to repair and replicate themselves.

THIS PROCESS OF SENESCENCE IS THE BASIS OF AGING.
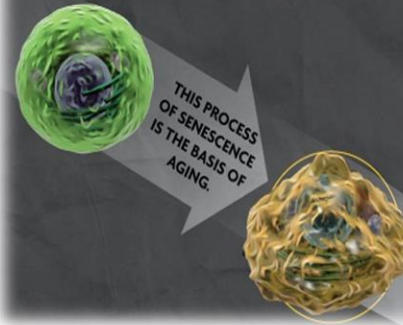
SCIENTISTS BELIEVE senescence is an irreversible step in the lives of cells, but what's not known is why this happens in the first place.

ONE THEORY IS THAT SENESCENCE OF CELLS developed to prevent the uncontrollable growth of cells in old age; we know this as cancer.

Children will be learning to:

Use 8 compass points; Begin to use 4 figure co-ordinates to locate features on a map. Begin to draw a variety of thematic maps based on their own data. Compare maps with aerial photographs. Select a map for a specific purpose. (E.g. Pick atlas to find Taiwan, OS map to find local village.)

Begin to use atlases to find out about other features of places. (e.g. find wettest part of the world) Measure straight line distance on a plan. Find/recognise places on maps of different scales Use index and contents page within atlases.

Computer Science – We are game developers

Children plan their own simple computer game. They design characters and backgrounds, and create a working prototype, which they develop further based on feedback they receive. Rising Stars – 'We Are Game Developers'
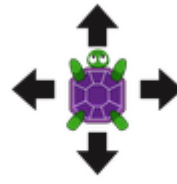•Create original artwork and sound for a game •Design and create a computer program for a computer game, which uses sequence, selection, repetition and variables •Detect and correct errors in their computer game •Use iterative development techniques (making and testing a series of small changes) to improve their game

Driving Game

Dancer

2go

Football Game

Feed the duck

Art/DT

Year 5 Skills

DT– Graphics / Resistant materials

Children will be learning:

to generate ideas through brainstorming and identify a purpose for their product
to draw up a specification for their design

to develop a clear idea of what has to be done, planning how to use materials, equipment and processes

to select appropriate materials, tools and techniques

to use skills in using different tools and equipment safely and accurately

to evaluate a product against the original design specification

to evaluate it personally and seek evaluation from others

Music

Composition

Identify different starting points or composing music. Explore, select combine and exploit a range of different sounds to compose a soundscape. Write lyrics to a known song. Compose a short song to own lyrics based on everyday phrases. Compose music individually or in pairs using a range of stimuli and developing their musical ideas into a completed composition.

Performance skills

Present performances effectively with awareness of audience, venue and occasion.

Key Vocabulary
- Composition
- performance
- Soundscape
- Audience

RHE	PE

RHE

Year 5 this term will be learning About the following topics in our weekly sessions:

Impacted Lifestyles

Making Good Choices

Giving Assistance

The Trinity

Catholic Social Teaching

Reaching Out

PE

Athletics
Children will learn to:

Explain how confidence can affect performance.
Draw on previous knowledge of tactics, skills and strategies.
Develop interest in participating in sports activities and competitions.
Identify different levels of performance and use subject specific vocabulary.

Athletics skills/objectives
develop the consistency of their actions in a number of events
increase the number of techniques they use
choose appropriate techniques for specific events
understand the basic principles of warming up
understand why exercise is good for fitness, health and wellbeing
evaluate their own and others' work and suggest ways to improve it

Foundation Subject
IMPACT QUESTIONS

Topic/Geography

Can you use the points of a compass to describe your position?

Can you locate Australia on a map?

Can you describe some of the physical features of Australia?

PE

How can you improve your performance?

How does your confidence affect your performance?

Music

How does the stimuli Affect my choice of lyrics?

RHE

How can we help others safely and responsibly?

How can we ensure we make good choices in our lives?

Computing

How can I detect an error in my sequence of code?

How can I improve my computer programme?

Art

How do I select the appropriate tools and materials for my task?

What skills do I need to use?